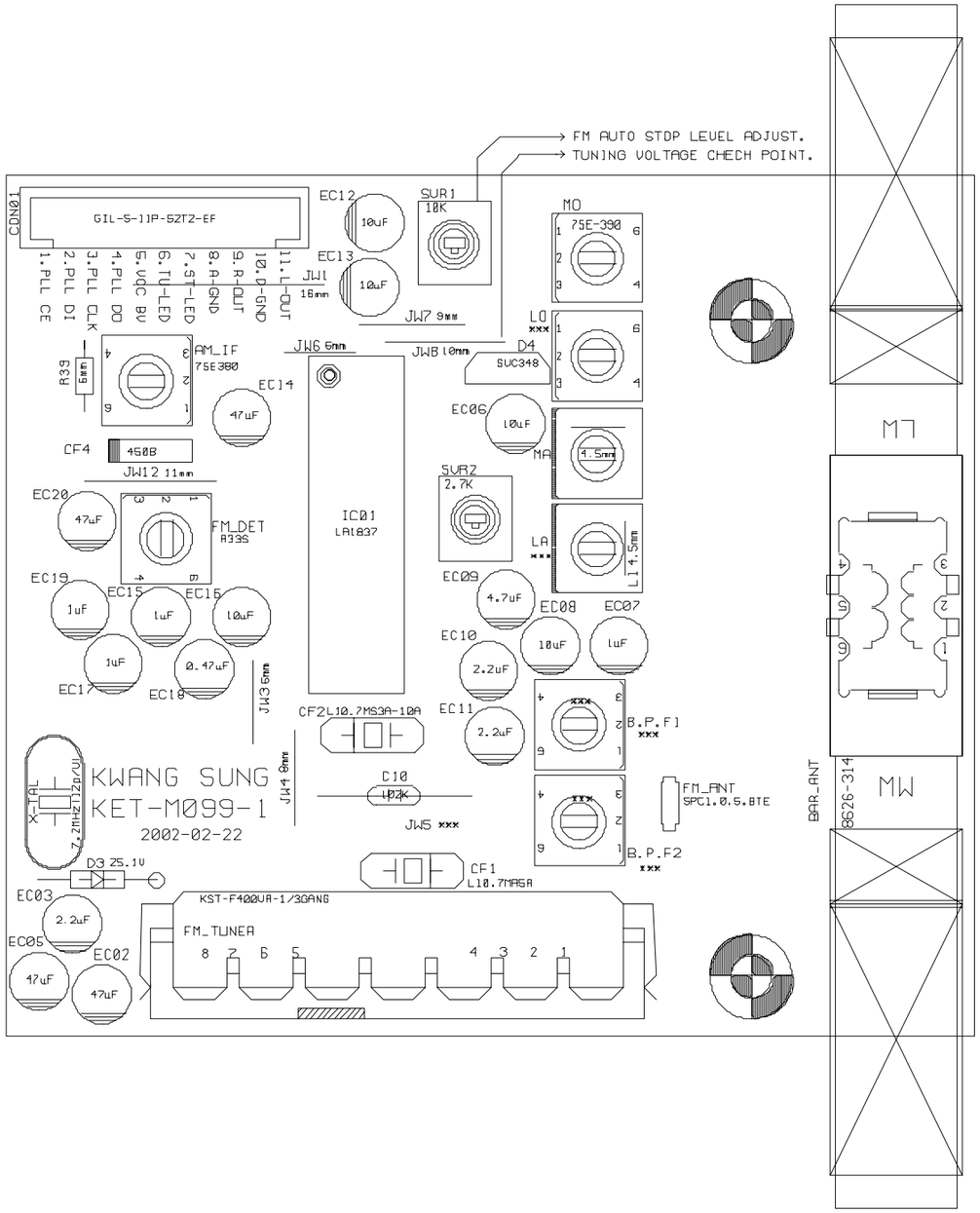
1. Alignment and Adjustments

1-1 Tuner



FM THD Adjustment	
SSG FREQ.	98 MHz
Adjustment point (FM-DET)	FM DETECTOR COIL
Minimum Distortion (Figure 1-1)	

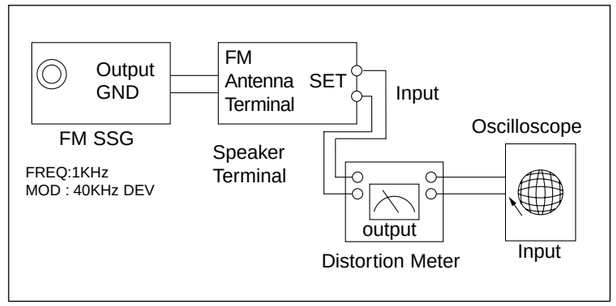


Figure1-1 IF CENTER and THD Adjustment

FM Search Level Adjustment	
SSG FREQ.	98 MHz
Adjustment point (SVR1)	BEACON SENSITIVITY SEMI-VR(10KΩ)
Adjust SVR1 so that “Voltage” of GND and CON(6pin) is 0V (Figure 1-2)	

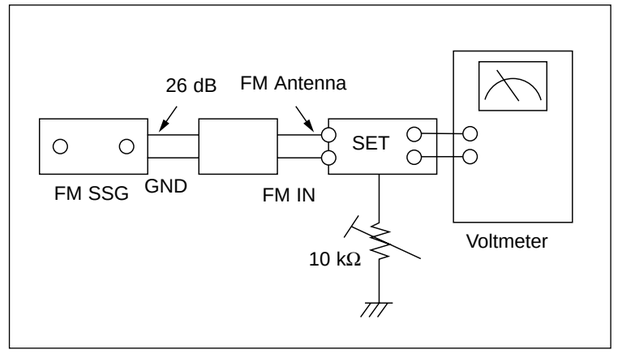


Figure1-2 FM Auto Search Level Adjustment

1-1-1 Test Equipment

1. AM Standard Signal Generator (S.S.G) : 400Hz, 30% MOD
2. Oscilloscope
3. VTVM
4. Frequency counter
5. Loop antenna
6. Dummy load (4Ω)
7. DC voltmeter

1-1-2 Pre-Adjustment

1. Check the source voltage
2. Press TUNER/BAND to select the AM(MW) function.
3. Set the EQ/S.BASS control to OFF position.
4. Set the volume control to approximaterly 50mw (4Ω)

1-1-3 AM Adjustment

Step	Item	Connection	SSG.FREQ.	FREQ. Setting	Adjust. Point	Remark
1	Intermediate frequency (IF) adjustment	Figure 1-5	450 KHz	522 KHz	AM-IF	Maximum output
2	AM frequency coverage adjustment	Figure 1-4 Connect DC voltmeter to AM VT(JW8) and GND	-	522 KHz	MO	1.2V
3			-	1611KHz	-	No Adjustment
4	AM tracking adjustment	Figure 1-5	594 KHz	594 KHz	MW-ANT	Maximum output
5		-	-	-	-	No Adjustment

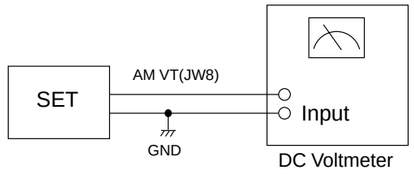


Figure 1-4

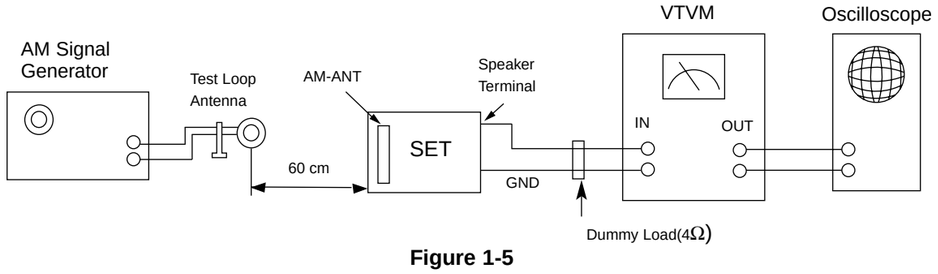


Figure 1-5

1-1-4 MW/LW

Step	Item	Connection	SSG.FREQ.	FREQ. Setting	Adjust. Point	Remark
1	Intermediate frequency (IF) adjustment	Fig 1-5	450 KHz	522 KHz	IT2	Maximum output
2	MW frequency coverage adjustment	Fig 1-4	-	522 KHz	OT1	1.0V(LOW)
3			-	1611 KHz	OCT2	4.6V(HIGH)
4	MW tracking adjustment	Fig 1-5	594 KHz	594 KHz	MW ANT COIL	Maximum output
5			1404 KHz	-	-	No Adjustment
6	LW frequency coverage adjustment	Fig 1-4	-	144 KHz	OT2	0.7V(LOW)
7			-	290 KHz	OCT4	3.1V(HIGH)
8	LW tracking adjustment	Fig 1-5	170KHz	170 KHz	LW ANT COIL	Maximum output
9			270KHz	-	-	No Adjustment

1-2 Cassette Deck

1-2-1. Recording BIAS adjustment

1) Connect frequency counter to JW18 (See Fig.1-6)and press the Record button.
2) Adjust KT1 (BIAS OSC COIL) until frequency counter reads 105 KHz.

1-2-2. Tape AZIMUTH adjustment

1) Connect the equipments as per Fig.1-8 to adjust the tape azimuth with test tape (recorded at 6.3KHz : MTT-113N)
2) Play the test tape after inserting in DECK.
3) Adjust the azimuth ajustment screw of left side of record/play head for maximum output and for the same channel phase. (see Fig.1-7)

1-2-3. Tape speed adjustment

1) Connect the equipments as shown in Fig.1-8 adjust the tape speed with test tape (recorded at 3KHz : MTT-111N)

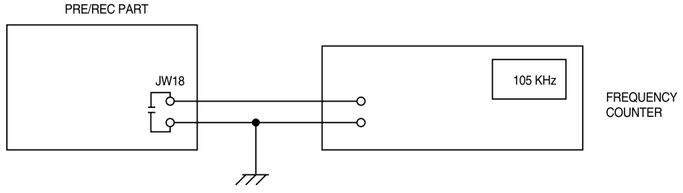


Fig.1-6 Recording bias adjustment

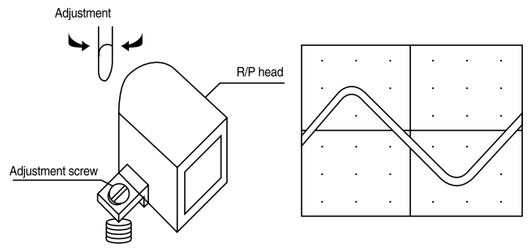


Fig.1-7 Azimuth speed adjustment

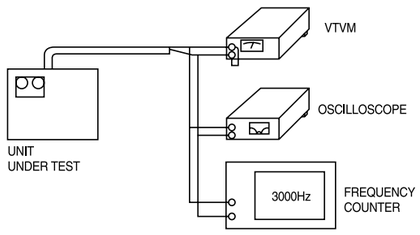


Fig.1-8